

Breeding Bird Survey Summary Report

Bayfield County Forest Units 4 and 5



(Romanchuck, 2006)

Project Initiated by:
Bayfield Co. Forestry Dept. - Washburn, WI



(Dewaghe, 2007)



(Knutti, 2007)

Survey Conducted by and Report Prepared by:
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Introduction and Methods:

I conducted 350 Breeding Bird Survey unlimited point counts, and 34 nightjar point counts in the Bayfield Co. Forest Units 4 and 5 from June 8 to July 3, 2008. A total of 9 land classifications in various stages of succession were surveyed. They included Grassland, Upland Brush, Jack Pine, Red Pine, White Pine, Aspen, Red Oak, Scrub (Northern Pin) Oak and Swamp Conifer. The units are actively managed by a variety of methods including selective and clear cut timber harvest, burning, scarification, tree planting, chemical and mechanical brush removal and deer exclusion. Habitats were generally dry as pure sand is the most common soil base in the area.

The driest areas are dominated by jack pine and red pine plantations with Ericaceous understory, and brush prairies with oak grubs and scattered grasses and forbs. The grassland category areas have sparse grass at best due to lack of moisture. Upland habitats with slightly better soil had open pin oak and aspen forests. The most mesic sites in the CTH H and A areas near Iron River supported white pine, red oak and higher productivity aspen forests.

Breeding Bird Survey methods generally followed the protocol established by Howe et al (1997). Points were predetermined by the Bayfield County Forestry Department, and located by GPS (Garmin 76CX) and compass. Surveys started at first light and extended to approximately 9:30 unless conditions warranted otherwise. Surveys were not conducted when winds were >12mph and affected bird detection or when there was precipitation. I recorded all birds seen and heard at each point during the 10 minute count period, noted the minute (1-10) each was first detected, and estimated the distance to each bird (25, 50 100 or >100m). Temperature, wind speed and sky condition were also recorded.

Nightjar surveys followed the methods establish by the Wisconsin Breeding Bird Initiative (Paulios, 2008). Survey points were established along a predetermined route at 1 road mile intervals. I listened for six minutes for nightjars at each site. Other nocturnal calling birds like owls, cuckoos, etc. were also noted. If birds were detected, I documented each minute(s) they were calling separately. Site description, location, number of houses, background noise, passing cars, wind, and sky conditions, and up to three dominant habitat descriptors (open, pine forest, hardwood forest, marsh/wetland and water) were also recorded. Surveys started after sunset and once the moon was above the horizon and at least $\frac{1}{2}$ full. Surveys ended after the moon set or before sunrise. All data was subsequently entered into an Excel spreadsheet for later analysis.

Results and Species Summaries:

I documented a total of 5907 birds during the BBS representing 92 species for a mean of 16.88/plot (Appendix A – Raw data). An additional four species (*Sandhill Crane* (*Grus canadensis*)), *Tennessee Warbler* (*Vermivora peregrina*), *Pine Siskin* (*Carduelis pinus*), and *Red Crossbill* (*Loxia curvirostra*) were heard interpoint or after the day's survey

period was over. Unfortunately, no Kirtland's Warblers (*Dendroica kirtlandi*) were found even though I survey many habitat areas that looked suitable for them.

In general, burned brush prairies and regenerating aspen clear cuts had the highest densities and diversities while unthinned closed canopied red pine plantations with needle ground cover and no understory and closed canopy aspen forests with no understory had the fewest individuals and lowest diversity (personal observation). Forestry management practices that promoted large contiguous habitats, and preserved at least some trees during timber harvest also seemed to increased density and diversity (personal observation).

Ovenbirds (*Seiurus aurocapillus*), Red-eyed Vireo (*Vireo olivaceus*) and Eastern Towhee (*Pipilo erythrrophthalmus*) were the most abundant species making up 12.54%, 7.06% and 7.01% of the breeding bird community respectively (Appendix 2 – Community Summary). Twelve other species made up at least 2% of birds surveyed. They included Chestnut-sided Warbler (*Dendroica pensylvanica*), Clay-colored Sparrow (*Spizella pallida*), Nashville Warbler (*Vermivora ruficapilla*), Veery (*Catharus fuscescens*), Rose-breasted Grosbeak (*Pheucticus ludovicianus*), Hermit Thrush (*Catharus guttatus*), Song Sparrow (*Melospiza melodia*), Chipping Sparrow (*Spizella passerina*), Eastern Wood-Pewee (*Contopus virens*), Vesper Sparrow (*Pooecetes gramineus*), Common Yellowthroat (*Geothlypis trichas*) and Least Flycatcher (*Empidonax minimus*).

During two nights of nightjar surveys, I located 57 nightjars of which 50 were Whip-poor-wills (*Caprimulgus vociferous*) and seven were Common Nighthawks (*Chordeiles minor*). A single Black-billed Cuckoo (*Coccyzus erythrophthalmus*) was also detected, but no owls were heard. The survey ran through mostly uninhabited areas with little artificial light or noise pollution. Whip-poor-wills were common in clear cut areas while Common Nighthawks seemed to be restricted to only the most open areas such as those that had been burned or recently clear cut.

The following species summaries are based on personal observations noted during the survey period.

Alder Flycatcher ALFL 4661

I found Alder Flycatchers occupying territories in just about any open "brush" habitat. They were absent from the most open areas, but immediately colonized an area at the first invasion of aspen suckers or oak grubs. They were found at low densities in young pine plantations, but only if there was a substantial deciduous component. They were almost always associated with Brown Thrashers, Yellow Warblers, Common Yellowthroats, Song Sparrows and Eastern Towhees.

American Crow AMCO 4880

Crows preferred the open habitats in the areas just north of Barnes. They were regularly encountered, but did not seem to be as abundant as ravens which they seemed to avoid. Elsewhere they were only occasionally encountered.

American Goldfinch AMGO 5290

Goldfinches were occasionally encountered in just about any open habitats with a brush component.

American Redstart AMRE 6870

I found many fewer American Redstarts than I expected considering the expansive aspen forests I surveyed. Birds seldom achieved densities of more than 2/pt, and were completely absent from areas I thought they would/should be in. A vertical component, and >50% hazel understory seemed to be minimum requirements for them, but even when these were met they were sometimes absent; especially on the driest sites. I think low moisture/productivity of sites is the likely explanation for their absence in these locations. Golden-wing, Mourning, Canada, and Black-and-white Warblers were common associates.

American Robin AMRO 7610

Robins were found in almost any habitat if there were shrubs for them to nest in. They were dependable occupiers of mature red pine plantations.

American Woodcock AMWO 2280 - SGCN

I heard Woodcocks peenting only twice during the survey - once between pts. on the nightjar routes near the Hughes Town Hall in an open field, and a second time at pt. OXVDD209 which had recently been clear cut and had nothing left for habitat but bracken at the edge of an aspen forest. This was my first pt of the morning, and two males were peenting on opposite ends of this 20+ acre opening. I also flushed several birds from brush between pts. in the Hughes Town Hall area. All of these individuals were located on sites that were drier than I thought they would occupy. No birds were observed anywhere other than in this approx. 5 square mile area.

Baltimore Oriole BAOR 5070

I only encountered orioles in a couple of locations. Very few site had the deciduous, open canopy and relatively moist habitat they prefer so this wasn't surprising. The practice of leaving a few overstory red oaks as seed trees in near clear cut areas should benefit this species in the near future.

Barn Swallow BARS 6130

A single individual was seen foraging over a point.

Black-and-white Warbler BAWW 6360

I observed Black-and Whites on a regular basis in early-successional, dry deciduous, and mixed forests. They were typically located with American Redstarts, Chestnut-sided, Nashville, and Connecticut Warblers. BAWWs seem to be able to tolerate poorer quality sites with little to no young aspen than other early-successional species, and actually seemed to increase in deciduous areas that had a jack pine component.

Black-backed Woodpecker BBWO 4000 – SGCN/Special Concern

Black-backeds were a pleasant surprise. They were not common, but I encountered them on a regular basis in "old-growth" jack pine where a high percentage of trees were dead or dying. I was lucky enough to observe several birds "flake-foraging" bark off these dead jack pine. They were not encountered in any other area. Red-breasted Nuthatches, Connecticut, Yellow-rumped and Nashville Warblers along with Blue-headed Vireos were common associates. BBWO were not observed in any other habitats, and it seems that without forest fire areas to forage in, these overgrown jack pine forests are probably their best second option.

Black-billed Cuckoo BBCU 3880 - SGCN

A single bird was heard during nightjar surveys in the CTH A/Barnes Rd. area, and an additional four birds were heard the last week of the survey – three on the last morning. None of the birds were within close proximity to the pt. so I can say very little about what habitats they might be utilizing. They do not, however, seem to be at all common in the area.

Blackburnian Warbler BLBW 6620

I only found Blackburnians in areas that had canopy white pine trees with a deciduous understory and a well developed brush component. Males were only observed singing from the upper canopy of white pines. Because this habitat is limited in the survey area (several pts. where I found them were logged almost immediately following the survey ⊕), and those areas that do exist seem to be slated for timber harvest, this bird will continue to be a rare find in the area. When I encountered Blackburnians in the white pine super canopy, there was almost always a Black-throated Green Warbler in the deciduous canopy and a Canada Warbler in the understory. All three seemed to require these more mesic mixed forests.

Black-capped Chickadee BCCH 7350

A common resident found in just about any forest habitat. They have finished their nesting season, and families were observed foraging together.

Black-throated Green Warbler BTNW 6670

Like Blackburnians, Black-throated Green Warblers seemed to prefer forests with a white pine component, but I also found them in pure red oak and red oak/aspen forests. These birds were not common anywhere as they seem to require more mesic conditions than the area provided. I found most BTNW in the most mesic red oak forests that had rolling topography.

Blue Jay BLJA 4770

Blue jays thrive just about anywhere. They were most often encountered in pine forests including red pine plantations.

Blue-headed Vireo BHVI 6290

One of the bigger surprises of the survey was how dependable Blue-headed Vireos were in “biodesert” mature, twice-thinned red pine plantations. Almost every mature plantation with an open understory had a Yellow-rumped Warbler, a Hermit Thrush, and an Eastern Wood-Pewee to go along with its Blue-headed. I also occasionally found them in oak/pine mixed forests.

Brewer's Blackbird BRBL 5100

I regularly encountered Blackbirds in the most open “sparrow” country with some widely scattered brush. Areas that had even been trenched for tree planting seemed to have a lot of birds calling – perhaps they were using the trenches as a foraging area.

Brown Creeper BRCR 7260

A few Brown Creepers were encountered in pine and mixed forests. They are probably more common than the survey indicates as they seemed to sing infrequently.

Brown Thrasher BRTH 7050 - SGCN

Brown Thrasher heaven occurs in the Upland Brush/Grassland habitats that dominate the southern end of the study area. Oak grubs were to be preferred, and there numbers dropped rapidly or disappeared altogether in areas that had a lot of aspen. They were also found in young pine plantations with some deciduous brush. They abandon these sites once the pines reach approximately 10 feet unless there were big gaps among the trees. Eastern Towhees, Vesper, Song, and Clay-colored Sparrows, Alder Flycatchers, Yellow Warblers, and Common Yellowthroats were regular associates.

Brown-headed Cowbird BHCO 4950

I found Cowbirds to be much less common than I expected. They are definitely in the area, but they were only encountered sporadically. I noticed Red-eyed Vireos and Eastern Kingbirds aggressively chasing female cowbirds on two occasions. Presumably they realize they are nest parasites.

Canada Goose CAGO 1720

I observed a single flock of Canada Geese fly over a study site. They were observed elsewhere in the area on a number of small lakes in the County Forest area.

Canada Warbler CAWA 6860 – SGCN/Special Concern

Canada Warblers occupied areas with approximately 50-70% closed canopy and a well developed and complex brush layer. The birds seemed to prefer areas that were moister than generally available, and I normally found Canadas on only the highest quality areas that seem to fit there some what narrow habitat requirements. They regularly occurred with Blackburnian, and Black-throated Green Warblers, and Blue-headed Vireos. American Redstarts were also associates, but only on the moistest sites - the same sites that seemed to support a higher redstart density.

Cape May Warbler CMWA 6500 – SGCN/Special Concern

A single Cape May was heard singing from the crown of a black spruce in a sizable swamp conifer stand. I tried to visually locate the bird, but could not. He sang a perfect Type 1 song for most of the time I was there though so I'm quite confident in the record. I also recorded two Winter Wrens, and observed Golden-crowned Kinglets, and Yellow-rumped Warblers at this site.

Cedar Waxwing CEDW 6190

Cedar Waxwings were regularly observed feeding on serviceberries (*Amelanchier* sp.), sand cherries (*Prunus pumilla*) and blueberries (*Vaccinium angustifolium*) in open areas.

Chestnut-sided Warbler CSWA 6590

Where there are aspen edges there are Chestnut-sided Warblers. Next to Ovenbirds, Chestnuts were by far the most common wood warbler encountered. They nested in clear cut areas with brush patches to mature aspen forests with a brush understory as long as the canopy wasn't completely closed. Common associates included Golden-winged, Mourning, and Black-and-white Warblers, American Redstarts, and Alder Flycatchers.

Chipping Sparrow CHSP 5600

Chipping sparrows preferred/tolerated drier sites in young pine plantations and open areas than most other sparrows. They also don't seem to mind canopy cover as they were common in mature red pine plantations where they were frequently heard singing in the understory while a Pine Warbler sang above them. Other associates included Clay-colored, Vesper and Song Sparrows, and Nashville Warblers.

Clay-colored Sparrow CCSP 5610

The brush specialist of the sparrow group, Clay-colored Sparrows persist in pine plantations after all other sparrows have abandoned them, and could still be found when trees were 15+ feet if there were openings with deciduous brush. They reach their highest density in areas with oak and hazel grubs that are head high. This species is abundant in the open brush areas in the southern part of the study area. They are probably under-detected as their thin buzzy song is easily lost in the din of their louder neighbors or the slightest breeze. Unless conditions were ideal, I'm not confident I could detect them more than 40m away. Common associates include Vesper, Song, and Chipping Sparrows, Brown Thrashers, Indigo Buntings and Nashville Warblers

Common Grackle COGR 5110

I located a large nesting colony on the edge of a recent red pine clear-cut where 35+ birds were busily foraging and calling. A couple of other individuals were observed as flyovers.

Common Loon COLO 0070

A couple of flyover Common Loons were observed at and between points. They were a regular species at local lakes in and near the County Forest.

Common Nighthawk CONI 4200

I heard Nighthawks in open areas that were free of brush on the first pt of the morning. They reached their highest densities in areas that had just been burned or clear cut or, even better, both. They seem to be fussier about habitat selection than their most common associate, Whip-poor-wills. Vesper Sparrows and Brewer's Blackbirds also seemed to prefer these most open areas with little ground cover.

Common Raven CORA 4860

Ravens were abundant in and over the open southern study sites. Unless they were obviously flying over the study area to some place distant, I recorded them as utilizing the study area, and thus included them as part of the community. They out number crows in the south area, and seemed to be detected at just about every point.

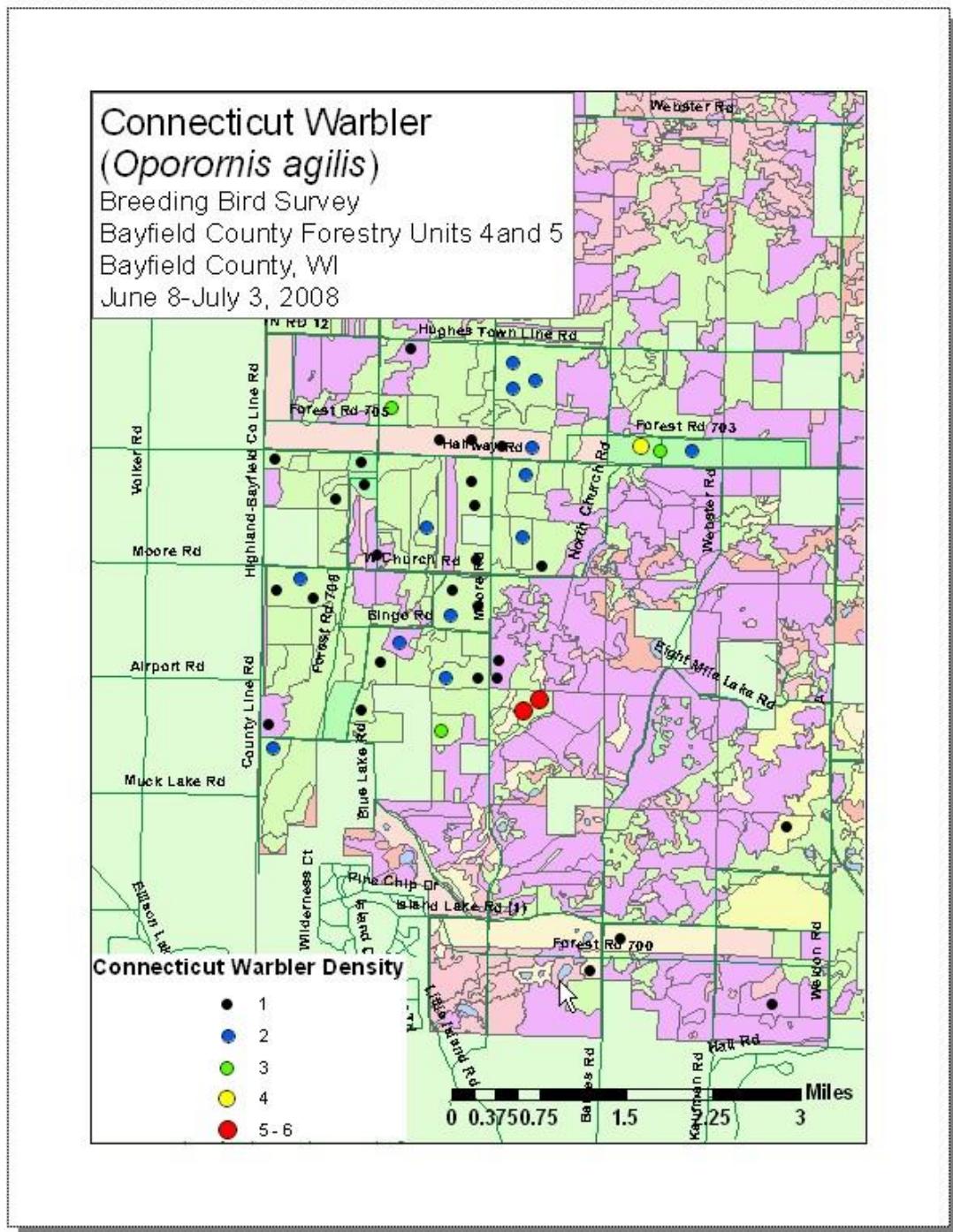
Common Yellowthroat COYE 6810

I found Yellowthroats in most open brush prairie areas as well as any wet opening along ponds or seep/vernal pools if there was open canopy. In prairie areas, they seemed to prefer willow clusters and small aspen sucker patches over oak areas. They were often found with Yellow and Golden-winged Warblers, Alder flycatchers, Indigo Bunting, and Grey Catbirds.

Connecticut Warbler CONW 6780 – SGCN/Special Concern

Connecticut Warblers were common to abundant in Jack Pine forests in the southern part of the survey area in Barnes Township. They reached their maximum densities (6+ birds/pt) in 30ft Jack Pine with 40% canopy cover and a thick blueberry/bearberry/grass understory. Birds were regularly encountered at lower densities in young Jack Pine stands as short as 20ft up to overmature Jack Pine at 40+ if they had suitable moss/berry/grass understory. They were absent from the driest Jack Pine sites, and occurred sporadically in mature Red Pine plantations with moderately open canopy and an understory that wasn't dominated by needles and had a strong blueberry and at least some brush component. Although this species was abundant in its preferred habitat, it was largely restricted to an approximately 7,000 acre area of nearly mature to mature jack pine forests South of Hughes Town Line Road, West to the Co. Line Road, East to Webster Rd. and South to Barnes Rd. I spent about 20 minutes observed a male's singing behavior following surveys on June 16th. The bird was between 15ft down/30ft up in a mature jack pine, and about

5ft out/3ft in from the end of the branch. During this time, he spent little time foraging, and was almost completely stationary. The tree was part of a cluster of jack pine in a small opening in a jack pine dominated forest. There were extensive patches of blueberry in the opening, and around the base of the tree. The birds really seem to be specialists in this landscape as they occupy habitats that don't seem to be preferred by many other species. Nashville and Black-and-white Warblers, both of which don't seem to mind the drier pine forests were regular associates.



Downy Woodpecker DOWO 3940

Downy Woodpeckers were uncommon or, more likely, undetected in oak dominated forests.

Eastern Bluebird EABL 7660

I noted Bluebirds in a few recent clear cuts, and in openings in red pine plantations that had no understory. Both places likely provided open ground for foraging.

Eastern Kingbird EAKI 4440

Kingbirds were especially common in recently burned areas, areas that had been herbicided, and upland brush sites. Forestry practices that retained or even created snags for foraging perches definitely benefit this species. Associates included Brown Thrashers, Vesper and Clay-colored Sparrows and Upland Sandpipers.

Eastern Wood-Pewee EAWP 4610

Pewees were common in most closed canopy forests if there was an open understory and dead branches to serve as sallying perches. They were a regular occupant of mature – thinned and twice thinned red pine plantations as well as oak and red oak forests. Least Flycatchers were there most reliable associate along with Hermit Thrushes, Blue-headed Vireos and Scarlet Tanagers.

Evening Grosbeak EVGR 5140

Although I heard several birds on a number of occasions between points, I only recorded a single individual at a swamp conifer pt. Because I only surveyed three SC pts, it's hard to make any generalizations about their density or associates in the area.

Field Sparrow FISP 5630 - SGCN

A very Field Sparrows occupied new jack pine and red pine plantation areas where the trees were less than 2ft. tall. The areas the birds were in had more grass than most areas I surveyed, and that may be the key to their being there. Even the “grassland” areas were really more brush prairie, and thus not what a FISP is looking for. Vesper, and Clay-colored Sparrows, Common Yellowthroats, and Yellow Warblers were also found in these areas.

Golden-crowned Kinglet GCKI 7480

Three Kinglets were detected in Swamp Conifer stands. One group was foraging in a family group among tamarack and black spruce. Winter wrens, Yellow-rumped, a Cape May and several Nashville warblers were also found at the site.

Golden-winged Warbler GWWA 6420 - SGCN

Based on all the aspen I survey, I expected to find more Golden-wings than I did. They seemed to be confined to areas with active aspen sucker growth following clear cut or aspen forest edges that had a soft, heterogeneous edge rather than a sharp drop off to nothing or non-aspen brush. They also seemed to reject drier aspen sites for those that were more mesic. Associates included Chestnut-sided, Mourning, and Black-and-White Warblers, American Redstarts, Indigo Buntings and Gray Catbirds.

Grasshopper Sparrow GRSP 5460 - SGCN

Grasshopper Sparrows require large open areas to breed, and there were only a few areas that had the patch size they seem to require. The birds that were found were in the very middle of these habitat areas which were actually recent clear cuts rather than true “grasslands”. Besides the usual open country “sparrow” crowd, Upland Sandpipers, which also have large contiguous habitat requirements, were also found in these areas. Although their song does not carry well, and could easily be overlooked thus causing their numbers to be underestimated, I did not hear any other birds between points.

Gray Catbird GRCA 7040

I found Gray Catbirds to be much less common than Brown Thrashers. They seemed to be confined to brushy areas that were moister and had aspen edges. Associates included Eastern Towhees, Indigo Buntings, Golden-winged, Chestnut-sided and Mourning Warblers and Brown Thrashers.

Great-crested Flycatcher GCFL 4520

This was another bird I expected to encounter a lot more than I did. The individuals I did find were in red oak, aspen or mixed forests with mostly closed canopy. Associates included Rose-breasted Grosbeak, Scarlet Tanager, Eastern Wood-Pewee and Least Flycatcher.

Great-horned Owl GHOW 3750

I heard two Great-horned Owls on my first points of the morning. Both birds were heard calling from Oak forest areas.

Hairy Woodpecker HAWO 3930

Like Downies, I only detected a handful of Hairy Woodpeckers. The birds were in a variety of habitats that didn't seem to have much in common.

Hermit Thrush HETH 7590

A thrush of dry forests, the highly detectable Hermit Thrush was found throughout in any closed or nearly closed canopy forests. They were common in mature red pine plantations with or without ground cover, jack pine forests, red and pin oak forests, and occasionally aspen forests as well.

House Wren HOWR 7210

House Wrens were found in transitional habitats at the edge of clear cuts, burns, and overgrown brush areas. They seemed to favor areas that had had at least a couple of years of regrowth following loss of canopy. Although they didn't seem to require moist areas, they weren't found on the driest sites either. Indigo Buntings, Gray Catbirds, Eastern Towhee and Mourning Warblers were their most common associates.

Indigo Bunting INBU 5980

Indigo Buntings replaced Vesper and Clay-colored Sparrows in area on a gradient from dry to moist/oak grubs to aspen in much the same way as Gray Catbirds replace Brown Thrashers. They were common on the edge of slashings with Mourning, Golden-winged and Chestnut-sided Warblers, and Eastern Towhees.

Kirtland's Warbler KIWA – SGCN/State and Federally Endangered Species

Despite high hopes and a large area of potentially suitable open jack pine habitat with trees in the 10-20ft range with Ericaceous understory, I heard no evidence of Kirtland's Warblers. Although I have never been to Michigan to see their primary breeding ground, expansive areas look exactly as I visualize the habitat should look. If they do eventually colonize the area, it will likely be in areas that currently support Nashville, and Palm Warblers. When the trees get tall enough that Connecticut Warblers arrive, I imagine that will be the point when Kirtland's would abandon a site. Maybe next time ☺.

Killdeer KILL 2730

I only found Killdeer out in two clear cuts from this spring? in areas that were near logging truck landing/loading zones and thus had a lot of bare ground. They were located in areas that also held Brewer's Blackbird and Eastern Bluebirds.

Least Flycatcher LEFL 4670 - SGCN.

Least Flycatcher required mature forests that had open understory for sallying perches. They were most commonly encountered in closed canopy oak forests with an open understory, but were also regularly found in the oldest red pine plantations. Common associates included Eastern Wood-Pewee, Scarlet Tanager, Blue-headed Vireo, Hermit Thrush and Veery.

Mourning Dove MODO 3160

Mourning Doves were found in open habitats like jack pine barrens, upland brush, clear cuts and red pine plantations. A few nests were observed on the ground under young pines. A habitat generalist of open areas, they seem to have few specific requirements as long as the canopy is not closed.

Mourning Warbler MOWA 6790

The “slashing or edge warbler”, Mournings colonize areas that have undergone several years of regrowth, and have a well developed deciduous shrub/ground cover layer adjacent to deciduous or mixed forests. Although they don't require aspen suckers at the edges, they seem to prefer it. They were also relatively common on red oak edges while being absent on drier sites. This early successional species was often found with Chestnut-sided, and Golden-winged Warblers, Gray Catbirds, Indigo Buntings, Eastern Towhees and White-throated Sparrows.

Nashville Warbler NAWA 6450

In the absence of Kirtland's Warblers, Nashville Warblers could just as well be referred to as the “jack pine warbler”. From spruce/tamarack bogs, to red pine plantations of all ages, to mixed jack pine aspen forests, these conifer generalists seemed to be everywhere in the area except on pure aspen sites. Nashvilles were able to survive in the driest pine plantations where trees had achieved a canopy. Just as the sparrows are giving up on a site, the Nashvilles and Connectic和平 move in. They even occurred in red pine plantations that were 30ft high, had a needle understory, and had never been thinned – the worst habitat I found as far as avian density and diversity. Associates were numerous, but some of the most common included Clay-colored Sparrows, Eastern Towhees, Connecticut Warblers, and Hermit Thrushes.

Ovenbird OVEN 6740

The ubiquitous generalist of closed canopy forests, Ovenbirds were found in any habitat that had a roof over their heads. Mature red pine plantations and quaking aspen stands on dry soil with no understory often had only a handful of individual species, but Ovenbirds were always present even in these lowest productivity habitats. They were almost always accompanied by Red-eyed Vireos and Veerys – in fact on the previous two mentioned habitats, these three were often the only birds present.

Palm Warbler WPWA 6720

Another surprise of the survey, I found a handful of Palm Warblers (including a female I kicked off a nest) in young jack and red pine plantations where trees were 10-15 ft. high with a thick blueberry understory. Normally thought of as a black spruce bog warbler, Palms achieved density of 2 birds per point at one site, and I heard several others between points in this area. Their habitat parameters seem to be narrow, but apparently the Ericaceous brush understory/evergreen overstory is more important than soil moisture. Associates included Nashville, and Connecticut Warblers, Yellow-bellied Flycatchers, Clay-colored Sparrows and Eastern Towhees.

Pileated Woodpecker PIWO 4050

I found Pileated Woodpeckers in variety of closed canopy forest habitats as well as in oak forest areas that had recently gone through near clear cuts. A couple of keystones were found in aspen and white birch trees, and several individuals were observed drumming on hollow logs or branches. Associates include Scarlet Tanagers, Eastern Wood-Pewees and Yellow-throated Vireos.

Pine Siskin PISI 5330

I heard Pine Siskins on at least two occasions as small flock flew over either interpoint or after survey periods had ended for the day. The birds appear to be in the area, but not utilizing the habitats I was surveying.

Pine Warbler PIWA 6710

Surrounding habitat does not seem to matter for Pine Warblers. As long as there were two-four mature/super canopy red or white pine (rarely jack) there would be a Pine Warbler. One male was even observed in a grove of pines that had been left in a brush prairie. They were regularly found in the oldest red pine plantations. Associates included Chipping Sparrows, Yellow-rumped, Blackburnian and Black-throated Green Warblers, Blue-headed Vireos, Purple Finches and Hermit Thrushes.

Purple Finch PUFI 5170

Although not as common as Pine Warblers, I could just as well carbon copy the paragraph above. Purple Finch seemed to show no real pattern to habitat selection as long as there were overstory/super-canopy conifers.

Purple Martin PUMA 6110

A pair of Purple Martins was observed foraging over a plot.

Red-bellied Woodpecker RBWO 4090

A single Red-bellied Woodpecker was observed in a hillside red oak forest that had a bunch of seepage vernal ponds in the vicinity. Although very far north for this species, it isn't shocking considering the string of warm winters we have experienced along with this species' history of pushing the northern boundary of their range.

Red-breasted Nuthatch RBNU 7280

I heard Red-breasted Nuthatches in most mature pine forests including red-pine plantations. They were often found with Connecticut, Yellow-rumped and Nashville Warblers along with Blue-headed Vireos and Hermit Thrushes.

Red Crossbill RECR 5210 - SGCN

I did not observe any Red Crossbills on a pt, but I did see a flock of three birds fly over between points.

Red-eyed Vireo REVI 6240

Next to Ovenbirds, Red-eyes were the most common bird in the study. A bird that reaches its highest density in areas of aspen canopy, they were also found in small aspen groves/oak grubs in upland brush areas, and in red oak and mixed forests elsewhere. They were almost always found with Ovenbirds, Veerys, Rose-breasted Grosbeaks, and Scarlet Tanagers.

Red-headed Woodpecker RHWO 4060 - SGCN

Three birds were seen during the study. All were in open areas feeding in dead oak trees that had been left in the middle of clear cut/burn? areas in the area just north of Barnes. In typical Red-headed fashion, the birds were calling loudly and actively moving about while foraging. Continuing to leave or creating snags in clear cut areas would likely benefit this and other cavity nesting/snag foraging species as well as providing singing perches for other birds. Associate species in the immediate area included Eastern Kingbirds, Clay-colored Sparrows, and Eastern Towhees.

Red-tailed Hawk RTHA 3370

A few individuals were seen soaring/hunting over open country areas.

Red-winged Blackbird BWBL 4980

Red-wings are a supreme generalist so I shouldn't have been surprised to find them living around vernal ponds, except those vernal ponds were in 60% closed canopy areas. A few other birds were also found around vernal/seepage ponds in recent red oak near clear cuts.

Rose-breasted Grosbeak RBGR 5950

I found Rose-breasted Grosbeaks in just about any forested habitat except pure jack pine or red pine. The males are such prolific singers, and are so detectable in general that their numbers in the over all community is probably skewed, but there's no question they are common in mixed forests with at least some aspen or birch component. While the males were often out singing in open areas, I never saw females except in more closed canopy forests. Scarlet Tanagers, Veerys, Red-eyed Vireos and Ovenbirds were their most common associates.

Ruby-throated Hummingbird RTHI 4280

Considering their low detectability, Rubies were pretty common in the study area in areas that had white birch trees. They were observed on numerous occasions "borrowing" sap lunches from Yellow-bellied Sapsucker wells. I did see one confrontation where a sapsucker tried to chase one away. He failed. ☺

Ruffed Grouse RUGR 4150

I heard a few grouse drumming and stumbled across a hen and her chicks at a single point. Males were drumming in higher moisture aspen forests with mostly closed canopy. Veerys, Ovenbirds and Red-eyed Vireos were the most common species in these areas.

Rufous-sided (Eastern) Towhee RSTO (EATO) 5870

Towhees were found anywhere there were brush and some sort of canopy opening. The surrounding habitat didn't seem as important. Along with Clay-colored Sparrows, they were the last "open country" species to abandon pine plantations. Although not as abundant as on brush prairies, they were a regular territory holder in slashings, blowdowns or just gaps of sufficient size in an otherwise solid forest. Their most consistent associates include Clay-colored, Vesper, and Chipping Sparrows, Nashville, Yellow, and Chestnut-sided Warblers and Alder Flycatchers.

Sandhill Crane SACR 2060

Although not heard on any point, a pair (unison calling) of cranes was observed foraging in a bog meadow north of the Swamp Conifer point 203. I saw no evidence of any colts.

Scarlet Tanager SCTA 6080

I regularly encountered Scarlet Tanagers in dry open oak forests with limited understory. They were absent from forests that had a strong pine component, or that were exclusively aspen. Yellow-throated Vireos, Hermit Thrushes, Rose-breasted Grosbeaks, Veerys and Eastern Wood-Pewees were regularly encountered with them.

Sharp-shinned Hawk SSHA 3320

I located two Sharp-shinned Hawks. One was in a red oak upland forest near water, while the other and more memorable bird was in a cedar/spruce conifer swamp. The second bird warned me twice, and then flew at me with talons outstretched before veering away when she got within 10 meters. I got the message.

Sharp-tailed Grouse STGR 0308 – SGCN/Special Concern

I stumbled (literally) over a Sharp-tail my first morning near Barnes, and continued to encounter them occasionally in brush prairies. The birds were all detected by cackle, and only two of them flushed. I suspect I walked past others without noticing them. Brown Thrashers, Eastern Towhees, Alder Flycatchers, Clay-colored and Vesper Sparrows were obligates in these habitats.

Slate-colored Junco (Dark-eyed) SCJU 5670

I had previously only encountered breeding Juncos in Wisconsin along rivers or in cedar swamps so I was a bit surprised to find several males in dry scrub oak openings and on the edge of upland red pine clear cuts. One male was chip scolding as though defending a nest, and I located a female after the count when I went to investigate and get a visual on him. White-throated, and Clay-colored Sparrows, Chestnut-sided, Nashville, and Mourning Warblers and American Redstarts were also in the area.

Song Sparrow SOSP 5810

Song Sparrows, another habitat generalist, were common but not abundant in open brush prairies, along vernal ponds, and near other wet habitats. They were normally found with Clay-colored Sparrows, Yellow Warblers, Common Yellowthroats, Brown Thrashers and Eastern Towhees.

Tree Swallow TRES 6140

I observed Tree Swallows foraging over brush prairies on several occasions. I also observed a pair that was nesting in a dead birch that had been left in the middle of a recent clear cut.

Tennessee Warbler TEWA 6470

Tennessee Warblers were not heard on any points, but two males were detected between points. Both were in the Lake Millicent region between HWY 2 and CTH H east and south of the Village of Iron River. The first bird was north of pt. AVDD217. The second was between pts. AVDD214 and AVDD215. The habitats where they were singing were strikingly similar. Each was dominated by young aspen 40ft high, but not in a closed canopy. Both males were in ravines, and thus were in the moistest locations in the immediate area. The areas also had a significant brush understory that was patchy with open areas of grass etc. Neither bird was visually confirmed which obviously would have added weight to this unusual record, but on both occasions, a Nashville Warbler was singing nearby for comparison. This is a bird I am familiar with from migration, and I'm quite confident in the identification.

Upland Sandpiper UPSA 2610 – SGCN/Special Concern

Similar to Grasshopper Sparrows, I only found Upland Sandpipers in the biggest patches of open habitat. The two birds I observed were in a recent jack pine clear cut with slashing piles scattered about and a lot of bare ground. I was surprised to find other birds calling from another clear cut and not in an adjacent open grass area. Another bird was in a clear cut immediately adjacent to a recently burned area. Perhaps the brushy areas provide more cover from predators.

Veery VEER 7560 – SGCN

I found Veerys at most closed canopy deciduous forest points. They were most common in aspen dominated areas, but were also regularly encountered in oak forests. They seemed to prefer sites that had little understory. Almost every site that had Ovenbirds and Red-eyed Vireos in numbers had Veerys as well.

Vesper Sparrow VESP 5400

A sparrow of the open country, I found Vespers colonizing clear cuts that were apparently only weeks old. They also were found in open “grassland” areas that were more bare ground than grass. They persisted into open brush prairies, but quickly disappeared as brush thickened or trees grew up. Clay-colored, Song, and Chipping Sparrows were common associates along with Common Nighthawks and Whip-poor-wills.

Whip-poor-will WPWI 4170 – SGCN/Special Concern

I heard Whips on almost every first point of the day when I was in open or pine forest dominated areas. The birds seemed to prefer calling from the edge of clear cuts or open pine forests. By 15 minutes before sunrise, they were usually silent. The nightjar survey did a good job of demonstrating how widespread the birds are, but the BBS likely greatly underestimates how many there might be in open areas. Clay-colored, Song, Vesper and Chipping Sparrows were common associates along with Common.

White-breasted Nuthatch WBNU 7270

White-breasted Nuthatches replaced Red-breasted Nuthatches as I moved from pine to oak forests. Although not common, I encountered White-breasteds on a regular basis in red oak stands.

White-throated Sparrow WTSP 5580

Poor Sam occupied a variety of edge habitats where there was a gradual vertical gradient. They were commonly found with Chestnut-sided, Golden-winged, Mourning and Black-and-White Warblers.

Wild Turkey WITU 4160

One individual was heard gobbling on point, and another between points. There is little agriculture in the area, but that doesn't seem to be stopping them from moving north.

Winter Wren WIWR 7220

Two birds were detected in the same tamarack/black spruce/white spruce bog stand where I also hear the Cape May Warbler and Golden-crowned Kinglets.

Wood Duck WODU 1440

A single hen duck was a fly over on a brush prairie site.

Wood Thrush – SGCN

I heard a single Wood Thrush on the second to last day of the survey. Apparently this bird was unclear on what “Wood Thrush” habitat should look like as he was singing in a dry upland Scrub Oak forest as part of a thrush trio with two Hermits. Mesic closed canopy areas that you would expect to find Wood Thrushes in was limited to one or two points were I thought the habitat looked suitable. The birds, however, did not agree.

Yellow Warbler YWAR 6520

Yellow Warblers were common to abundant in willow and hazel grubs in open brush prairies. Their numbers declined rapidly in areas where aspen or oak grubs were the dominant brush. Common Yellowthroats, Alder Flycatchers, Clay-colored Sparrows and Eastern Towhees were regular associates.

Yellow-bellied Flycatcher 4630

Another surprise bird for the survey, a few Yellow-bellied Flycatchers were detected in 10ft red pine plantations with Ericaceous understory. Like the Palm Warblers they were located with, they seemed to be honing in on a narrow window of habitat. Other birds in the area included Clay-colored Sparrows, Eastern Towhees and Nashville Warblers.

Yellow-bellied Sapsucker YBSA 4020

Where ever there were white birch and sugar maples there was sure to be sapsuckers. In places they were abundant, and their high density led to frequent calling and easy detection.

Yellow-rumped (Myrtle) Warbler MYWA 6550

Yellow-rumps, the generalist of the wood warblers, were not as common as I had expected. The only habitat I consistently found them in was mature red pine plantations where they dependably occurred along with Blue-headed Vireos, Hermit Thrushes and Ovenbirds.

Yellow-shafted Flicker YSFL 4120

Flickers were observed “anting” out in open areas in brush prairies as well as drilling into snags and fallen wood in these areas. They were also occasionally found in aspen areas.

Yellow-throated Vireo YTIVI 6280

I found Yellow-throated Vireos in the more mesic red oak forest and aspen forests with a strong oak component. If there was water located near the point, it added to the likelihood of these birds holding territory. Scarlet Tanagers, Rose-breasted Grosbeaks, Red-eyed Vireos and Veery's were regular associates.

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